

Notice of Allowability

Application No.

10/764,600

Examiner

Duc T. Doan

Applicant(s)

MIZUNO, MAKIO

Art Unit

2188

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendments filed 12/19/06 and IDS filed 1/9/07.
2. ☒ The allowed claim(s) is/are 1, 13-15 (renumbered by Examiner).
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 1/9/07
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


HYUNG SOUGH
SUPERVISING PATENT EXAMINER
3-05-07

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set for in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/19/06 has been entered.

Claims 1-16 have been presented for examination in this application. In response to the last office action, claims 1,13-15 have been amended, claims 2-14,16 have been canceled. As the result, claims 1,13-15 are now pending in this application.

Applicant's remarks/amendments filed 12/19/06 have been fully considered with the result as follows,

Claims 1,13-15 are allowed

Allowable Subject Matter

Claim 1 is allowable over the prior art of record because the Examiner found neither prior art cited in its entirety, nor based on the prior art, found any motivation to combine any of the said prior arts which teach

“....a controller including a lock management table containing lock status, whether a lock is required or not, and an address correspondence table for indicating correspondence of areas in said cache storage system with areas in said at least one storage device, wherein said lock management table at least contains indices for

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identifying areas of said device in said cache storage system, flags for indicating said lock status of areas of said device in said cache storage system, and flags for indicating said lock status of areas in said at least one storage device corresponding to said areas of said device in said cache storage system..”;

“wherein said controller, upon receiving from said client a first lock request for an area of said at least one storage device, issues a second lock request to said at least one storage device to lock an area of said at least one storage device, and after receiving either status information of good or status information of reservation conflict from said at least one storage device, issues a second command of lock OK to said client in order to receive a first command of lock Acknowledge from said client, and upon receiving said first command of lock Acknowledge from said client, sends a second command of lock Acknowledge to said at least one storage device to update the contents of said lock management table of said at least one storage device to indicate lock ON for said area of said at least one storage device so that deadlock can be avoided when a first lock request is received from another client on the basis of contents of a lock management table of said at least one storage device”;

“..wherein said controller, upon receiving said first unlock request from said client, issues a second unlock request to said at least one storage device to unlock the area of said at least one storage device; and wherein said controller, upon reception of a second command of unlock OK from said at least one storage device, sends a second command of unlock Acknowledge to said at least one storage device to unlock said area of said at least one storage device”.

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The remaining dependent claims, not specifically mentioned, are allowed for the same rationale as the independent claim(s) being based from.

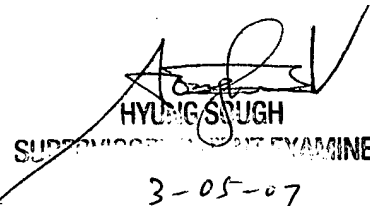
Conclusion

When responding to the office action, Applicant is advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist examiner to locate the appropriate paragraphs.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc T. Doan whose telephone number is 571-272-4171.

The examiner can normally be reached on M-F 8:00 AM 05:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Souh can be reached on 571-272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


HYUNG SOUH
SUPERVISOR, PATENT EXAMINER
3-05-07